

WHAT IS CLAIMED IS:

1. A method for routing an externally generated message in a network, comprising:

receiving at an ingress port of a network a message
5 from an external network, the message comprising internet protocol (IP) source and destination addresses and message data;

translating the IP source and destination addresses to internal addresses that are non-forwardable in the
10 external network; and

routing the message data in the network based on the internal addresses.

2. The method of Claim 1, wherein the internal
15 addresses comprise reserved loop back addresses.

3. The method of Claim 1, further comprising:

receiving at an egress port of the network a response to the message, the response comprising internal
20 source and destination addresses and response data;

translating the internal source and destination addresses to external IP addresses; and

transmitting the response data for routing in the external network based on the source and destination IP
25 addresses.

4. The method of Claim 3, further comprising:

storing an IP source address of the message; and

using the IP source address in translating an
30 internal address of the response for routing in the external network.

5. The method of Claim 1, wherein the message comprises a control message generated by a management station.

- 5 6. The method of Claim 1, wherein the internal addresses comprise a loop back indicator, a identifier of a node in the network and identifier of an element in the node.

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7. A system for routing an externally generated message in a network, comprising:

means for receiving at an ingress port of a network a message from an external network, the message
5 comprising internet protocol (IP) source and destination addresses and message data;

means for translating the IP source and destination addresses to internal addresses that are non-forwardable in the external network; and

10 means for routing the message data in the network based on the internal addresses.

8. The system of Claim 7, wherein the internal addresses comprise reserved loop back addresses.

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9. The system of Claim 7, further comprising:

means for receiving at an egress port of the network a response to the message, the response comprising internal source and destination addresses and response
20 data;

means for translating the internal source and destination addresses to external IP addresses; and

means for transmitting the response data for routing in the external network based on the source and
25 destination IP addresses.

10. The system of Claim 9, further comprising:

means for storing an IP source address of the message; and

30 means for using the IP source address in translating an internal address of the response for routing in the external network.

11. The system of Claim 7, wherein the message comprises a control message generated by a management station.

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12. The system of Claim 7, wherein the internal addresses comprise a loop back indicator, a identifier of a node in the network and identifier of an element in the node.

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13. A system for routing an externally generated message in a network, comprising:

logic encoded in media; and

the logic operable to receive at an ingress port of
5 a network a message from an external network, the message
comprising internet protocol (IP) source and destination
addresses and message data, to translate the IP source
and destination addresses to internal addresses that are
non-forwardable in the external network and to route the
10 message data in the network based on the internal
addresses.

14. The system of Claim 13, wherein the internal
addresses comprise reserved loop back addresses.

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15. The system of Claim 13, the logic further
operable to receive at an egress port of the network a
response to the message, the response comprising internal
source and destination addresses and response data, to
20 translate the internal source and destination addresses
to external IP addresses and to transmit the response
data for routing in the external network based on the
source and destination IP addresses.

25 16. The system of Claim 15, to logic further
operable to store an IP source address of the message and
use the IP source address in translating an internal
address of the response for routing in the external
network.

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17. The system of Claim 13, wherein the message comprises a control message generated by a management station.

- 5 18. The system of Claim 13, wherein the internal addresses comprise a loop back indicator, a identifier of a node in the network and identifier of an element in the node.